

Substitute for form 1449/PTO				<i>Complete if Known</i>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(Use as many sheets as necessary)</i>				Application Number	10/694,945
				Filing Date	October 29, 2003
				First Named Inventor	Vasudevan Parthasarathy
				Art Unit	2611
				Examiner Name	Tran, Khai
Sheet		1	of	2	Attorney Docket Number
					1875.5430000

<b>U.S. PATENT DOCUMENTS</b>					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if Known)			
/KT/	US1	4,627,070	12-02-1986	Champlin <i>et al.</i>	
	US2	4,833,605	05-23-1989	Terada <i>et al.</i>	
	US3	4,833,695	05-23-1989	Greub	
	US4	4,967,201	10-30-1990	Rich, III	
	US5	5,726,991	03-10-1998	Chen <i>et al.</i>	
	US6	5,793,990	08-11-1998	Jirgal <i>et al.</i>	
	US7	5,933,021	08-03-1999	Mohd	
	US8	6,081,570	06-27-2000	Ghuman <i>et al.</i>	
	US9	6,137,734	12-24-2000	Schoner <i>et al.</i>	
	US10	6,140,956	10-31-2000	Hillman <i>et al.</i>	
	US11	6,259,693 B1	07-10-2001	Ganmukhi	
	US12	6,317,804 B1	11-13-2001	Levy <i>et al.</i>	
	US13	6,438,717 B1	08-20-2002	Butler <i>et al.</i>	
	US14	6,483,849 B1	11-19-2002	Bray <i>et al.</i>	
	US15	7,032,139 B1	04-18-2006	Iryami <i>et al.</i>	
	US16	7,035,228 B2	04-25-2006	Baumer	
	US17	2001/0012288 A1	08-09-2001	Yu	
↓	US18	2001/0015664 A1	08-23-2001	Taniguchi	
	US19	2001/0021953 A1	09-13-2001	Nakashima	
/KT/	US20	2001/0017595 A1	08-30-2001	Cliff <i>et al.</i>	

<b>FOREIGN PATENT DOCUMENTS</b>					
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	FP1				T <sup>6</sup>
	FP2				
	FP3				
	FP4				
	FP5				
	FP6				
	FP7				
	FP8				
	FP9				

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/KT/	US21	2002/0054569 A1	05-09-2002	Morkawa	
	US22	2003/0009307 A1	01-09-2003	Mejia et al.	
	US23	2003/0048781 A1	03-13-2003	Peirson	
	US24	2003/0120791 A1	06-26-2003	Weber et al.	
	US25	2003/0172332 A1	09-11-2003	Rearick et al.	
	US26	2004/0083077 A1	04-29-2004	Baumer et al.	
	US27	2004/0088443 A1	05-06-2004	Tran et al.	
	US28	2004/0141497 A1	07-22-2004	Amirichimeh et al.	
	US29	2004/0141531 A1	07-22-2004	Amirichimeh et al.	
	US30	2004/0117698 A1	06-17-2004	Tran et al.	
	US31	2005/0190690 A1	09-01-2005	Tran	
/KT/	US32	2006/0250985 A1	11-09-2006	Baumer	
	US33				
	US34				
	US35				
	US36				
	US37				
	US38				
	US39				
	US40				

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	FP11				
	FP12				
	FP13				
	FP14				
	FP15				
	FP16				
	FP17				
	FP18				

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				<i>Art Unit</i>	2611
				<i>Examiner Name</i>	Tran, Khai
Sheet	1	of	3	<i>Attorney Docket Number</i>	1875.5430000

<b>NON PATENT LITERATURE DOCUMENTS</b>				
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published		
		T <sup>2</sup>		
	NPL1	Cisco Systems, Hiroshi Suzuki: Taking Ethernet Beyond the LAN, <a href="http://newsroom.cisco.com/dlls/innovators/optical/hiroshi_suzuki_profile.html">http://newsroom.cisco.com/dlls/innovators/optical/hiroshi_suzuki_profile.html</a>		
	NPL2	Cisco Systems, Q&A: Hiroshi Suzuki on Extending Ethernet Beyond the LAN, <a href="http://newsroom.cisco.com/dlls/innovators/optical/hiroshi_suzuki_qa.html">http://newsroom.cisco.com/dlls/innovators/optical/hiroshi_suzuki_qa.html</a>		
	NPL3	Cisco Systems, Innovators Profiles, <a href="http://newsroom.cisco.com/dlls/innovators/inn_profiles.html">http://newsroom.cisco.com/dlls/innovators/inn_profiles.html</a>		
	NPL4	Cisco Systems, Optical, <a href="http://newsroom.cisco.com/dlls/innovators/optical/">http://newsroom.cisco.com/dlls/innovators/optical/</a>		
	NPL5	Cisco Systems, Cisco Systems and Arapco Interactive Launch Internet Powered Property (IP2), <a href="http://newroom.cisco.com/dlls/global/asiapac/news/2000/pr_07-25.html">http://newroom.cisco.com/dlls/global/asiapac/news/2000/pr_07-25.html</a> .		
/KT/	NPL6	"Broadcom Announces the First 0.13-micron CMOS Multi-Rate Gigabit Octal Serializers/Deserializers" [online], Broadcom Press Release, October 29, 2002 [retrieved on 2003-07-16]. Retrieved from the Internet: <URL: <a href="http://www.broadcom.com/cgi-bin/pr/prps.cgi?pr_id=PR021029">http://www.broadcom.com/cgi-bin/pr/prps.cgi?pr_id=PR021029</a> > (5 pages).		
	NPL7	BCM8040 8-Channel Multi-rate 1.0-3.2-GBPS Retimer Switch [online], Broadcom Products Site Guide [retrieved on 2003-07-16]. Retrieved from the Internet: <URL: <a href="http://www.broadcom.com/products/8040.html">http://www.broadcom.com/products/8040.html</a> > (2 pages).		
/KT/	NPL8	8-Channel Multi-Rate CMOS Retimer with Full Redundancy [online], BCM8040 Product Brief, Broadcom Corporation (2002) [retrieved on 2003-07-16]. Retrieved from the Internet:<URL: <a href="http://www.broadcom.com/products/8040.html">http://www.broadcom.com/products/8040.html</a> > (2 pages).		
	NPL9	BCM8020 8-Channel Multi-rate 1.0-3.2-GBPS Transceiver [online], Broadcom Products Site Guide [retrieved on 2003-07-16]. Retrieved from the Internet: <URL: <a href="http://www.broadcom.com/products/8020.html">http://www.broadcom.com/products/8020.html</a> > (2 pages).		
/KT/	NPL10	8-Channel Multi-Rate CMOS Transceiver with Full Redundancy [online], BCM8020 Product Brief, Broadcom Corporation (2002) [retrieved on 2003-07-16]. Retrieved from the Internet: <URL: <a href="http://www.broadcom.com/products/8020.html">http://www.broadcom.com/products/8020.html</a> > (2 pages).		

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	NPL11	BCM8021 4-Channel Multi-rate 1.0-3.2-GBPS Transceiver with High-Speed Redundancy [online], Broadcom Products Site Guide [retrieved on 2003-07-16]. Retrieved from the Internet: <URL: <a href="http://www.broadcom.com/products/8021.html">http://www.broadcom.com/products/8021.html</a> > (2 pages).			
/KT/	NPL12	4-Channel Multirate 1.0-3.2-GBPS Transceiver with High-Speed Redundancy [online], BCM8021 Product Brief, Broadcom Corporation (2002) [retrieved on 2003-07-16]. Retrieved from the Internet: <URL: <a href="http://www.broadcom.com/products/8021.html">http://www.broadcom.com/products/8021.html</a> > (2 pages).			
/KT/	NPL13	Broadcom Announces the Industry's First 0.13-micron CMOS Advanced Transceiver Solution with Signal Conditioning for Low-Cost 10-Gigabit Over Copper Links [online], Broadcom Press Release, April 29, 2003 [retrieved on 2003-07-16]. Retrieved from the Internet: <URL: <a href="http://www.broadcom.com/cgi-bin/pr/prps.cgi?pr_id=PR030429A">http://www.broadcom.com/cgi-bin/pr/prps.cgi?pr_id=PR030429A</a> > (4 pages).			
/KT/	NPL14	Alaska Quad-Port Gigabit Ethernet Over Copper Transceivers, from <a href="http://www.marvell.com/products/transceivers/quadport/">http://www.marvell.com/products/transceivers/quadport/</a> ..., 1 page, printed May 8, 2007.			
		Alaska X10 Gigabit Ethernet Alaska Gigabit Ethernet Fast Ethernet Physical Layer (PHY) Transceiver Families Provide a Full Range of Ethernet Transceiver Solutions for the Broadband Communications Industry, from <a href="http://www.nuhorizons.com/FeaturedProducts/Volume3/Marvell/">http://www.nuhorizons.com/FeaturedProducts/Volume3/Marvell/</a> phy_transceiver.asp, 4 pages, Copyright 2007, printed May 8, 2007.			
/KT/	NPL16	Industry Breakthrough: Marvell Announces the First Quad-Port Transceiver to Support Both Copper and Fiber-Optic Gigabit Ethernet Interfaces, from Business Wire at <a href="http://www.encyclopedia.com/printable/aspx?id=1G1:68912211">www.encyclopedia.com/printable/aspx?id=1G1:68912211</a> , 4 pages, January 9, 2001, printed May 8, 2007.			
/KT/	NPL17	David Maliniak (ed.), Bel's integrated connector modules support Marvell's Alaska quad Gigabit Ethernet transceiver, from <a href="http://www.electronicsweb.com/Content/news/">http://www.electronicsweb.com/Content/news/</a> ..., 1 page, December 14, 2000, printed May 8, 2007.			
/KT/	NPL18	Marvell Gets Small, from <a href="http://www.lightreading.com/document.asp?doc_id=12004&amp;print=true">http://www.lightreading.com/document.asp?doc_id=12004&amp;print=true</a> , 1 page, February 19, 2002, printed May 8, 2007.			
/KT/	NPL19	Marvell Introduces the Industry's Smallest Quad-Port Gigabit Transceiver Device, Enabling Ultra High Port Density Enterprise Switching Systems, from <a href="http://www.marvell.com/press/press_NewsDisplay.do?releaseID=41">http://www.marvell.com/press/press_NewsDisplay.do?releaseID=41</a> , 3 pages, February 19, 2002, printed May 8, 2007.			
/KT/	NPL20	Q&A: Hiroshi Suzuki on Extending Ethernet Beyond the LAN, from <a href="http://newsroom.cisco.com/dlls/innovators/optical/hiroshi_suzuki_qa.html">http://newsroom.cisco.com/dlls/innovators/optical/hiroshi_suzuki_qa.html</a> , 3 pages, Copyright 1992-2003, printed July 29, 2003.			

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/KT/	NPL21	<i>IEEE Std. 802.3, Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) access method and physical layer specifications, Section Two, pp. 9-55, Copyright 2002.</i>		
/KT/	NPL22	<i>IEEE Std. 802.3, Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) access method and physical layer specifications, Section Four, pp. 9-152, Copyright 2005.</i>		
/KT/	NPL23	Ed Turner, David Law, Sept. 17-19, 2001, "IEEE P802.3ae MDC/MDIO", <a href="http://www.ieee802.org/3/efm/public/sep01/turner_1_0901.pdf">http://www.ieee802.org/3/efm/public/sep01/turner_1_0901.pdf</a> (copy attached).		
	NPL24			
	NPL25			
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